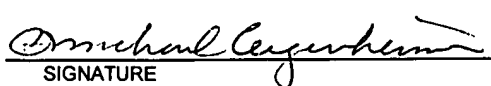


TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER 22198(2)US U.S. APPLICATION NO. (if known, see 27 CFR 1.55) 10/538459
INTERNATIONAL APPLICATION NO. PCT/US2003/039511	INTERNATIONAL FILING DATE 10 Dec 2003 (10.12.2003)	PRIORITY DATE CLAIMED 10 Dec 2002 (10.12.2002)
TITLE OF INVENTION ARTICULATED ELEMENTS AND METHODS FOR USE		
APPLICANT(S) FOR DO/EO/US BOYD, Robert R.; BARTILSON, B. Matt; HANNA, William T.; (see attached cont. pg.)		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input checked="" type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment. 14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input checked="" type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. <input checked="" type="checkbox"/> Other items or information: PCT/ISA/220 Transm of Intl Search Rpt (new abstract); Delegation of Authority for		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/538459		INTERNATIONAL APPLICATION NO. PCT/US2003/039511		ATTORNEY'S DOCKET NUMBER 22198(2)US		
The following fees have been submitted				CALCULATIONS	PTO USE ONLY	
21. <input checked="" type="checkbox"/> Basic national fee..... \$300				\$ 300.00		
22. <input checked="" type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)..... \$100 All other situations..... \$200				\$ 200.00		
23. <input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... \$100 International Search Report prepared and provided to the Office..... \$400 All other situations..... \$500				\$ 100.00		
TOTAL OF 21, 22 and 23 =				\$ 600.00		
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.						
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE			
- 100 =	/50 =		x \$250	\$		
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)).				\$		
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$		
Total claims	34 - 20 =	14	x \$ 50	\$ 700.00		
Independent claims	3 - 3 =	0	x \$200	\$ --		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+ \$360	\$ --	
TOTAL OF ABOVE CALCULATIONS =				\$ 1,300.00		
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.						
SUBTOTAL =				\$ 650.00		
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$		
TOTAL NATIONAL FEE =				\$ 650.00		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$ 120.00		
TOTAL FEES ENCLOSED =				\$ 770.00		
				Amount to be refunded:	\$	
				Amount to be charged:	\$	
<p>a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. _____. A duplicate copy of this sheet is enclosed.</p> <p>d. <input checked="" type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p>						
<p>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</p> <p>SEND ALL CORRESPONDENCE TO:</p> <p>C. Michael Gegenheimer Battelle Memorial Institute 505 King Avenue Columbus, Ohio 43201-2693 USA</p>						
				 SIGNATURE C. Michael Gegenheimer NAME 33,387 REGISTRATION NUMBER		

CONTINUATION PAGE FOR PTO-1390 10/538459

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

Continuation of "APPLICANT(S) FOR DO/EO/US":

FAULKNER, Lynn
HAUBERT, Thomas D.
GEGENHEIMER, C. Michael
STEIN, Holly A.
SCHELHORN, Jean E.
GLEESON, James B.
HOFFMAN PANCAKE, Mary
KELLEY, Brian C.
SMITH, Roger W.
TAYLOR, Kevin M.
ROSENBERG, Dov S.
POLL, Wayne L.

JC17 Rec'd PCT/PTO 10 JUN 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
DO/EO/US

CONCERNING SUBMISSION UNDER 35 U.S.C. 371 **10/538459**

In re U.S. National Entry of
PCT/US2003/039511

Inventors: BOYD, Robert R. *et al.*

Filing Date: Herewith

For: ARTICULATED ELEMENTS AND
METHODS FOR USE

File No: 22198(2)US

Date: 10 June 2005

CERTIFICATE OF MAILING

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

The undersigned hereby certifies that the attached:

Item	No. of Sheets
PTO-1390 Transmittal Letter to DO/EO/US Concerning Submission under 35 U.S.C. 371 plus Continuation page (in duplicate)	6
PTO-2038 Credit Card Payment Form	1
PTO-1595 Recordation Form Cover Sheet (in duplicate) and Assignment	13
Preliminary Amendment	12
Associate Power of Attorney for C. Michael Gegenheimer	2
PCT/ISA/220 Transmittal of Intl Search Report (incl new abstract)	5
Delegation of Authority for C. Michael Gegenheimer	1
Return Receipt Postcard	1

are being deposited with the United States Postal Service as:



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in an envelope addressed to the Commissioner for Patents, Mail Stop PCT, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date set forth below.

Brenda Block Koone
Signature

10 June 2005
Date of Deposit

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